



## Anti-Serum complement C3, Chicken-Polyclonal Antibody

**Catalog No.** PY-10119  
**Antigen species:** Human  
**Host species:** Chicken

**Quantity:** 100 $\mu$ g  
**Reactivity:** Human, chicken  
**Form:** Antigen affinity purified antibody

**Applications:** Western Blot

### Target description

Complement C3 contains two chains linked by a disulfide bond. Its activation by a C3 convertase releases the C3a anaphylatoxin from the amino end of the alpha chain and generates C3b, which associates with the Bb fragment of complement factor B to form the alternative-complement-pathway C3/C5 convertase. C3a anaphylatoxin is a vasoactive peptide and a mediator of inflammation. C3b, with its highly reactive thiol group, binds to the surface of foreign particles and facilitates phagocytosis. It binds to complement C5 and renders it susceptible to proteolysis by the classical-complement-pathway C3/C5 convertase. The activity of C3b is regulated by proteolytic cleavage involving factors H and I. Its degradation products can also be biologically active.

### Antigen

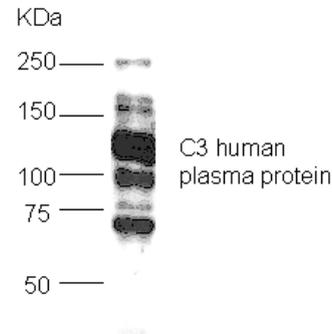
This polyclonal antibody was raised by immunizing chicken with human plasma C3 protein.

### Application

The antibody titer is more than 4,000 for Western blotting. It has not been tested in the other applications. However, for the first testing, we recommend 1/10,000 dilution for ELISA, 1/5,000 dilution for WB of recombinant protein, 1/400 dilution for tissue extracts or cell lysates, 1/100 dilution for immunohistochemistry (IHC) staining on frozen cryosections, 1/50 dilution for IHC staining on paraffin embedded sections.

### Related Products

1. Anti-serum complement C1q, poly Ab (PY-10118)



Antigens are loaded 5 $\mu$ g per well in 12% SDS-PAGE

### Western blot Protocol

1. Block membrane with 3% BSA in TBS buffer for 1 hour at 37°C.
2. Incubate membrane with IgY antibodies at dilution of 1: 5,000 at 37°C for 1 h.
3. Rinse 3 times with PBS-T, then wash membrane with PBS-T, 5 min each, total of 3 times.
4. Incubate with 2nd antibody (goat-anti-IgY/Fc-HRP) at dilution 1: 10,000 for ECL (with 1% milk PBS-T) at 37°C for 1 h.
5. Rinse 3 times with PBS-T, then wash with PBS-T, 5 min each with shaking, total of 3 times.
6. Perform ECL detection of signal using Pierce ECL kit.

### Storage

It is supplied as antigen affinity purified antibody in lyophilized powder. Redissolve the powder with 100 microliter sterile water will restore to the original concentration 1mg/ml (1xPBS). Store at 4°C for short-term application. For long-term storage, aliquot and store at -20°C.

### References

1. Behrendt N *et al.* Localization and functional significance of a polymorphic determinant in the third component of human complement. *Mol Immunol* **24**:1097-103 (1987).
2. Koch C & Behrendt N A novel polymorphism of human complement component C3 detected by means of a monoclonal antibody. *Immuno-genetics* **23**:322-5 (1986).
3. Botto M *et al.* Molecular basis of polymorphisms of human complement component C3. *J Exp Med* **172**:1011-7 (1990).